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EXAMINER
NGUYEN, VAN KIM T

ART UNIT	PAPER NUMBER
2152	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/750,554	NAVADA ET AL.
	Examiner	Art Unit	
	VAN KIM T. NGUYEN	2152	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 January 2008</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-26</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is responsive to communications filed on January 2, 2008.

Claims 1-26 are pending in the case.

Response to Arguments

2.   Applicant's arguments, see page 7, with respect to the rejection of claims 15-17

under 35 U.S.C. §112 have been fully considered and are persuasive. The rejection of claims 15-

17 under 35 U.S.C. §112 has been withdrawn.

3.   Applicant's arguments and amendment, see page 8, with respect to the rejection

of claims 8-14 under 35 U.S.C. §101 have been fully considered and are persuasive. The

rejection of claims 8-14 under 35 U.S.C. §101 has been withdrawn.

4.   Applicants' command regarding filing a terminal disclaimer is noted; however,

the double patenting rejection is remained.

5.   Applicant's arguments regarding the rejection of claims 1-26 have been fully

considered but they are not persuasive. However, as the previous Office action contains a

clerical error in, i.e., claims 1-4, 7-11, 14-17 and 18-26 should have been rejected under 35

U.S.C. §103(a) instead of 35 U.S.C. §102(b), this Office action is non final.

In response to applicant's arguments against the references individually, one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re*

Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues in substance that: (A) Salett fails to disclose inserting a vector in a packet; (B) Kalkunte fails to disclose inserting a vector in a packet that identifies a first device in a stack of forwarding devices that delivers the packet to an exception processor being shared by the forwarding devices in the stack; (C) Abali fails to disclose inserting a vector in a packet that identifies a first device in a stack of packet forwarding devices that delivers the packet to an exception processor being shared by a the forwarding devices in the stack.

In this case, (A) <u>Salett discloses inserting a vector in a packet:</u>

Salett teaches using the lower 56 bits of the 64-bit CAM cycle word to indicate source or routing information for a data frame. In particular, bits 0-47 are used to indicate ports, while the next eight bits are used to indicate the presence of up to eight switches. Thus, obviously, in order to identify a particular port/switch (i.e., a first device), a bit (i.e., a vector) corresponding to that particular port/switch has to be set (i.e., inserting).

(B) <u>Kalkunte was not relied upon for inserting a vector in a packet identifies a first device in a stack of forwarding devices</u>. Rather, Kalkunte was relied upon to show an exception processor being shared by the forwarding devices in the stack (i.e., the server is being shared by clients; Figure 41).

(C) <u>Abali was not relied upon for inserting a vector in a packet identifies a first device in a stack of forwarding devices</u>. Rather, Abali was relied upon to show removing the vector from the packet for delivering the packet to the exception processor (e.g., in source-based routing scheme, switches do not make any intelligent routing decisions. The switch strips off the first word before forwarding the packet to the next level in the network. Thus the packet contains no routing information upon arriving at its ultimate destination; col. 1: lines 46-65).

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making
and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
contemplated by the inventor of carrying out his invention.

7.   Claims 8-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the written description requirement. The claims contains subject matter which was

not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventors, at the time the application was filed, had possession of the claimed

invention.

Claim 8 recites the limitation "on a computer-readable medium" which is not supported

in the disclosure.

Claims 9-14 depend on claim 8, thus are rejected under the same basis.

Double Patenting

8.   Claims 1, 3-5, 7-8, 10-12, 14-15, 17-18, 20-21, 23-24 and 26 are provisionally

rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable

over claims 1-2, 4-5, 7-9, 11-12, 14-15, 16, 18-19, 21-22, and 24-25, of copending Application

No. 10/749,792, respectively, in view of Sallet et al (US 6,490,276). Although the conflicting

claims are not identical, they are not patentably distinct from each other because the claims recite

substantially same limitations, except delivering the packet to an exception processor being

shared by the packet forwarding device in the stack. Sallet discloses a method for forwarding a

data frame from a first switch to a second switch, thus it would have been obvious to one of

ordinary skill in the art at the time the invention was made to apply Sallet's method of

forwarding data frames to the instance application in order to transmit data effectively.

This is a _provisional_ obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

Claim Rejections - 35 USC § 103

9.   The text of those sections of Title 35, U.S. Code not included in this action can be

found in a prior Office action.

10.   Claims 1-4, 7-11, 14-17 and 18-26 are rejected under 35 U.S.C. 103(a) as being

anticipated by Salett et al (US 6,490,276), hereinafter Salett, in view of Kalkunte et al (US

7,139,269).

Regarding claims 1, 8, 15, 18, 21 and 24, Salett discloses a method comprising:

inserting a vector in a packet that identifies a first device in a stack of packet forwarding

devices that delivers the packet to an exception processor (e.g., a 64-bit header is used to indicate

the source and destination information for each set of data frames transmitted on the network.

The encoding is preferably in a vector form of 1 bit per port; col. 3: lines 44-63 and col. 4: lines

15-21).

However, Salett does not explicitly call for the exception processor being shared by the

packet forwarding devices in the stack.

As shown in Figure 41, Kalkunte teaches the server (port 8) is being shared by clients

(ports 1-6).

Kaklunte's shared exception processor is a well-known configuration in the art, e.g., a router routes traffic for many sources or a server can be shared among/connected to many clients. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made that Kaklunte's shared exception processor is a viable option in Salett's system.

Regarding claims 2, 9, 16, 19, 22 and 25, Salett-Kalkunte also discloses inserting a flag in the packet that indicates the packet is associated with an exception (e.g., the header provides six bits for the destination; Salett, col. 4: lines 18-21).

Regarding claims 3, 10, 17, 20, 23 and 26, Salett-Kalkunte also discloses using the vector and a table to determine a port for sending the packet to the first device in the stack of packet forwarding devices (using 64-bit word and CAM 213, 221 to transfer data frames between a port to a switch or between switches, e.g., when station A215 first transmits a data frame, it is received by switch 205 on port 4. The CAM 213 in switch 205 updates a station list contained in the CAM 213 to indicate that station A215 is on port 4; Salett, col. 4: lines 39-50).

Regarding claims 4 and 11, Salett-Kalkunte also discloses the vector includes a bit identifying the first device in the stack of packet forwarding devices (e.g., the lower 56 bits of the 64-bit CAM cycle word is used to indicate source or routing information for a data frame, with bits 48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

Regarding claims 7 and 14, Salett-Kalkunte also discloses the vector includes bits respectively identifying the packet forwarding devices in the stack (e.g., the lower 56 bits of the

64-bit CAM cycle word is used to indicate source or routing information for a data frame, with

bits 48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

11.   Claims 5-6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Salett-Kalkunte as respectively applied to claims 1 and 8 above, in view of Abali et al (US

5,721,820), hereinafter Abali.

Salett-Kalkunte discloses substantially all claimed limitations, except removing the

vector from the packet for delivering the packet to the exception processor.

Abali teaches removing the vector from the packet for delivering the packet to the

exception processor (e.g., in source-based routing scheme, switches do not make any intelligent

routing decisions. The switch strips off the first word before forwarding the packet to the next

level in the network. Thus the packet contains no routing information upon arriving its ultimate

destination; col. 1: lines 46-65).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply Abali's method of routing data in Salett-Kalkunte's system in order to

provide data routing in a topology independent fashion that satisfies cost, performance and

resource constraints.

Regarding claims 6 and 13, Salett-Kalkunte-Abali also discloses the packet is delivered

over a transmission line in an aggregate of transmission lines to the exception processor shared

by the packet forwarding devices in the stack (Abali; Figure 1, communications in the network is

facilitated by links connecting the processors or switches; col. 3: lines 3-25).

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to VAN KIM T. NGUYEN whose telephone number is (571)272-

3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
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